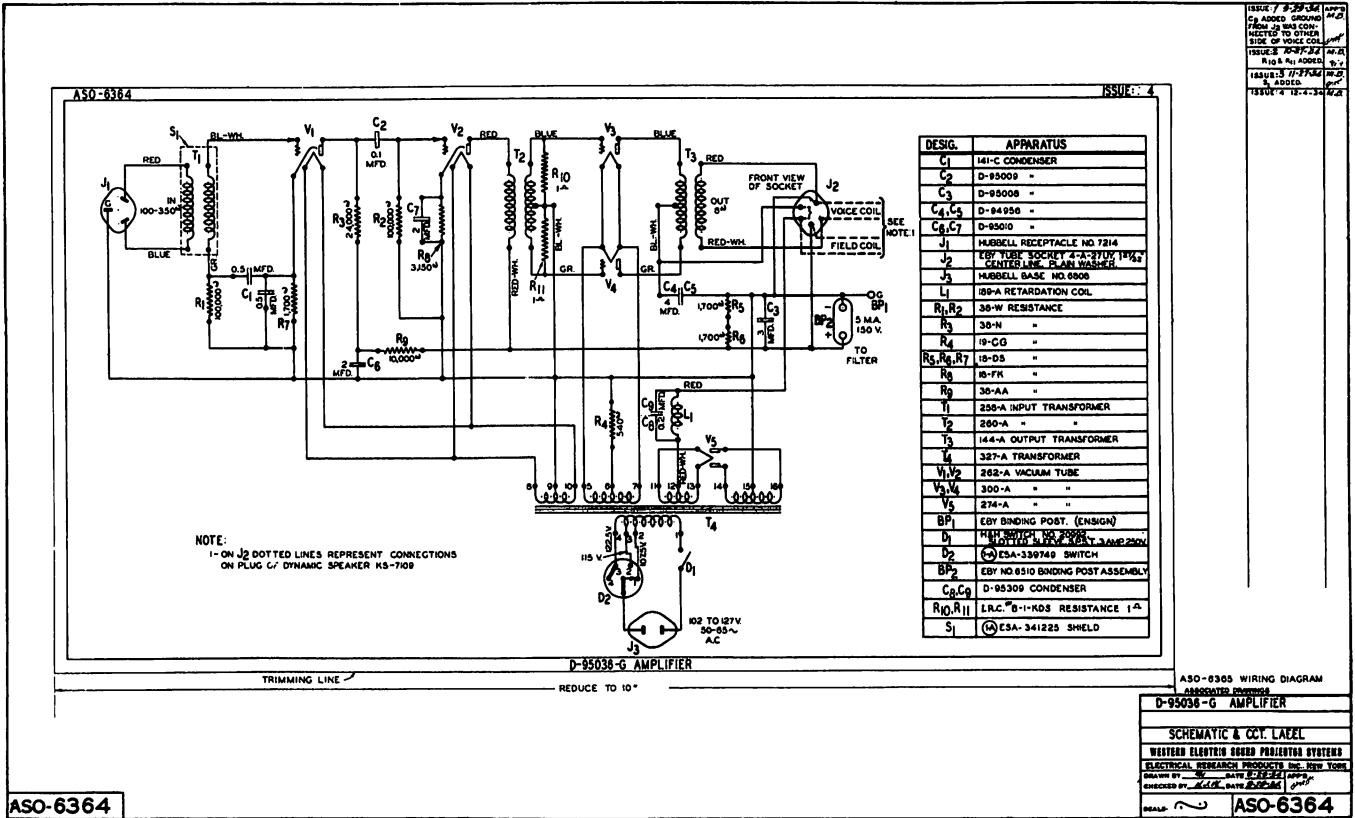


NOTE
 1- ON J2 DOTTED LINES REPRESENT CONNECTIONS
 ON PLUG OF DYNAMIC SPEAKER 15-7109

DESIG.	APPARATUS
C1	141-C CONDENSER
C2	D-95009 "
C3	D-95008 "
C4, C5	D-94958 "
C6, C7	D-95010 "
J1	HUBBELL RECEPTACLE NO 1214
J2	EBY TUBE SOCKET 4-A-270V 1 1/2" CENTER LINE PLAIN WASHER
J3	HUBBELL BASE NO 6808
L1	189-A RETARDATION COIL
R1, R2	38-W RESISTANCE
R3	38-N "
R4	19-FM "
R5, R6, R7	18-DS "
R8	18-FK "
R9	38-AA "
T1	258-A INPUT TRANSFORMER
T2	260-A "
T3	144-A OUTPUT TRANSFORMER
T4	327-A TRANSFORMER
V1, V2	282-A VACUUM TUBE
V3, V4	275-A "
V5	274-A "
BP1	EBY BINDING POST (ENSIGN)
D1	HUBBELL SWITCH NO 3095
D2	NOTED SLIP SWITCH 3 AMP 250V
D3	FSA-339749 SWITCH
BP2	EBY NO 6510 BINDING POST ASSEMBLY

NOTE "A" THE CIRCUIT SHOWN ABOVE IS FOR THE D-95036
 AMPLIFIER
 THE D-94531 AMPLIFIER IS IDENTICAL EXCEPT THAT
 THE FOLLOWING CONDENSERS ARE USED IN PLACE
 OF THOSE SPECIFIED ABOVE
 C2 IS A 141-B COND 0.5 MFD
 C3 IS A 131-A COND 4 MFD
 C4 & C5 ARE 138-A COND 1.5 MFD
 C6 & C7 ARE 139-A COND 2 MFD

REWORK FROM
 BL DRAWING
 ESO-34085
 ISS. 2 WITH THE
 FOLLOWING
 CHANGE
 NOTE "A" ADDED
 ISSUE T. 2-29-32



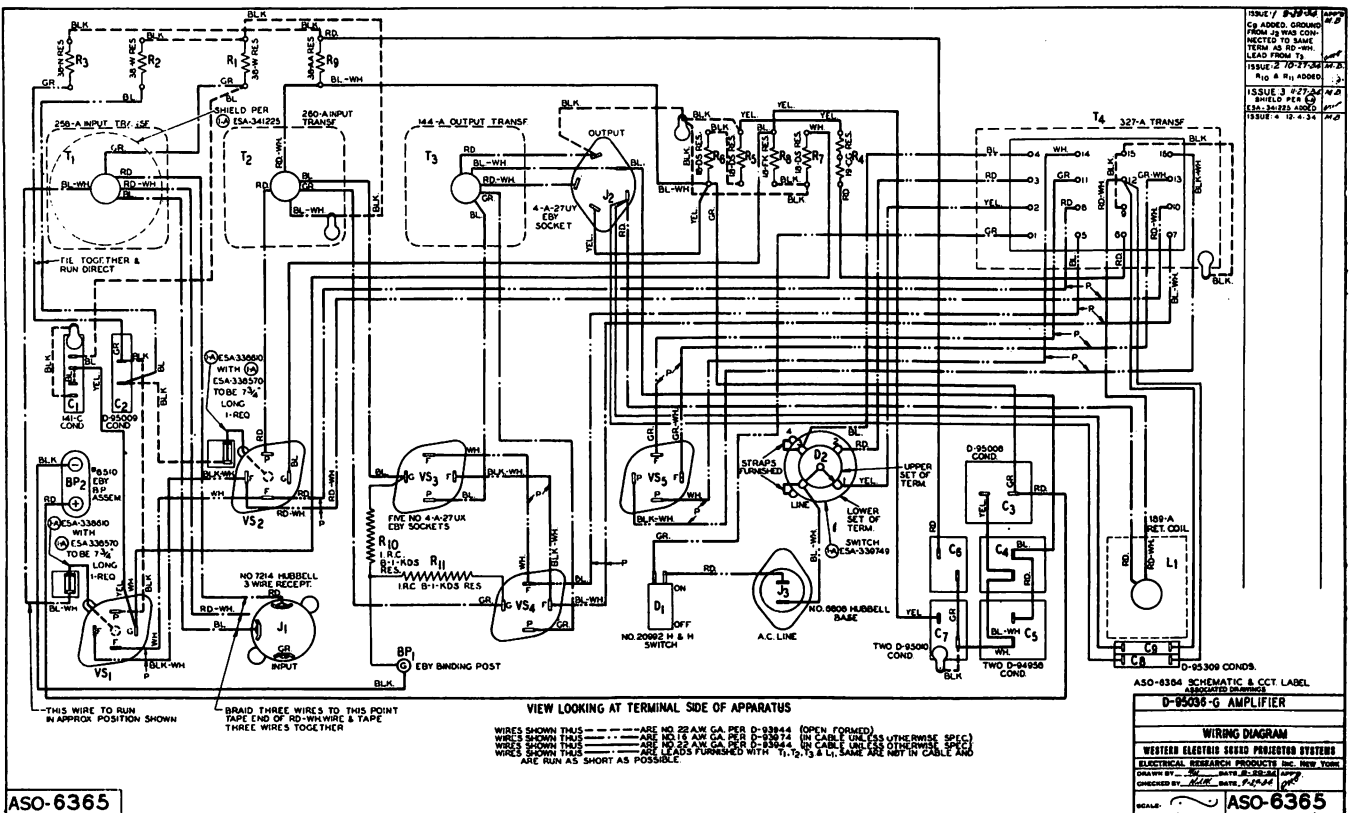
ISSUE 1 8-29-36
ISSUE 2 10-17-36
ISSUE 3 12-23-36
ISSUE 4 12-23-36

ASO-6364 WIRING DIAGRAM
ASSOCIATED EQUIPMENT
D-95036-G AMPLIFIER

SCHEMATIC & CCT. LABEL

WESTERN ELECTRON SOUND PROJECTION SYSTEMS
ELECTRICAL RESEARCH PRODUCTS INC. NEW YORK
DRAWN BY: DATE: CHECKED BY: MADE: **ASO-6364**

ASO-6364



ISSUE 1 8-29-36
ISSUE 2 10-17-36
ISSUE 3 12-23-36
ISSUE 4 12-23-36

ASO-6364 WIRING DIAGRAM
ASSOCIATED EQUIPMENT
D-95036-G AMPLIFIER

WIRING DIAGRAM

WESTERN ELECTRON SOUND PROJECTION SYSTEMS
ELECTRICAL RESEARCH PRODUCTS INC. NEW YORK
DRAWN BY: DATE: CHECKED BY: MADE: **ASO-6365**

ASO-6365

0. REASON FOR REISSUE

0.1 To bring information up-to-date; to cover the use of the D-94804 Amplifier in systems using 49 type Amplifiers (Sec. 3); and to omit information given in E.B. "Control Units, D-94852 Type", File 4.06.

1. ASSOCIATED DRAWINGS

- ASO-3690 & ASO-3691 - D-94531 & D-95036 Amplifiers, Schematic & Wiring Diagram
- ASO-3819 & ASO-3820 - D-94531-A & D-95036-A Amplifiers, Schematic & Wiring Diagram
- ASO-3907 - D-95036-B Amplifier, Schematic & Wiring Diagram
- ASO-3908 & ASO-3915 - D-95036-D Amplifier, Schematic & Wiring Diagram
- ASO-3936 & ASR-4378 - D-95036-E Amplifier, Schematic & Wiring Diagram
- ASO-6302 & ASO-6303 - D-95036-F Amplifier, Schematic & Wiring Diagram
- ASO-6364 & ASO-6365 - D-95036-G Amplifier, Schematic & Wiring Diagram

2. D-94531 & D-95036 AMPLIFIERS (UNMODIFIED) (FOR MODIFICATIONS, SEE SECTION 3)

2.1 Use - D-94531 Amplifier, as component of D-94675 and D-94675-A Loudspeaking Telephone Outfit
 D-95036 Amplifier, as component of D-94804 Amplifier, and D-94675-D Loudspeaking Telephone Outfit.

Consist of - Three stages and a rectifier using two 262-A Tubes in the first two stages; two 275-A Vacuum Tubes in the final push pull stage; and 274-A Vacuum Tube as a full wave rectifier. Rectacles for making connections to the input, output and power supply terminals; for connection to the external filter for supplying a portion of the rectified current to the BEO and associated amplifier; and a rotary switch for selecting the proper transformer primary tap as required for the line voltage, are included.

All equipment is mounted on an aluminum chassis; the overall dimensions are 18-3/4" x 23" deep x 7" high, and the weight is approximately 26 lbs. For tabulated data refer to E.B. "Amplifiers, General", File 4.03.

The D-95036 Amplifier differs from the D-94531 Amplifier, by the use of several condensers capable of withstanding higher operating temperatures and others of different capacity value (see Note on ASO-3691).

2.2 The D-94531 & D-95036 Amplifiers have no component gain control, since this function is performed by the D-94852 type Control Unit, or other accessory equipment. In cases where it is desired to reduce the fixed gain of the separate Amplifier Unit, this may readily be done by removing vacuum tube VI, from its socket, and connecting V-1 Grid Clip to the grid of V2. Since these Grid connections are within the respective tube shields, the V1 Grid lead should be lengthened and brought up inside the shield of V-2. No recoding is necessary.

3. MODIFICATIONS OF D-94531 & D-95036 AMPLIFIERS

3.1 For tabulated data on modified amplifiers, see "Amplifiers, General", File 4.03.

NOTE:- All modified amplifiers require the same type Vacuum Tubes as listed in Section 2.1, except the D-95036-B and D-95036-G Amplifiers, which use two 300-A Vacuum Tubes (instead of 275-A) in the final push-pull stage.

Code	Spec.	Modification	Use
D-94531-A	TA-130	Noise level decreased; gain increased 7 db; AC receptacle added for auxiliary Loudspeaking Telephone	Component of D-94675-B and D-94675-D Loudspeaking Telephone Outfit
D-95036-B	TA-196	Noise level decreased; gain increased 7 db; capacity increased to 5 watts (8 ohm load); 3 watts (16 ohm load); characteristic improved; chassis length increased.	Home entertainment systems (Not a component of D-94804 type Amplifier or D-94675 type L.S. tele. Outfit)

0. REASON FOR REISSUE

0.1 To bring information up-to-date; to cover the use of the D-94804 Amplifier in systems using 49 type Amplifiers (Sec. 3); and to omit information given in E.B. "Control Units, D-94852 Type", File 4.06.

1. ASSOCIATED DRAWINGS

- ASO-3689 - D-94804 Amplifier, Schematic.
- D-94804 AMPLIFIER (UNMODIFIED)

2.1 Use: In disconnected 44-70 and 49-70 Systems, as main amplifier and current supply set to two 62-A Amplifiers.

2.2 Description (See Figure 1)
 Required Power Supply . . . 105-125 volts, 50-624 cycles AC, 100 watts.
 D-94868 Apparatus Box, containing:
 1 - D-94852 Control Unit

The D-94868 Apparatus Box houses the amplifier and control unit. It has a cover which is hinged in place of the D-95036 Amplifier, and a circuit label. For dimensions and weight, see Figure 1.
 The D-95036 Amplifier mounts on the shelf of the D-94868 Apparatus Box. For tabulated data, refer to E.B. "Amplifiers, General", File 4.03. For detailed information, refer to Amplifiers, D-94531 & D-95036 Types, File 4.03. The D-94868 Apparatus Box and the D-94852 Control Unit are mounted below the amplifier. The D-94852 Control Unit contains a 62-A Amplifier, a filter for the plate and BEO supply, a filter for the plate and BEO supply, and terminals for all external connections (see E.B. "Control Units, D-94852 Type", File 4.06).

- 274-A V1 (RECTIFIER)
- 275-A OR 300-A (3RD STAGE PP)
- 282-A V1 (2ND STAGE)
- 282-A V1 (1ST STAGE)

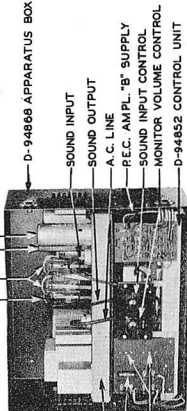


FIG. 1 D-94804 AMPLIFIER (COVER REMOVED)

3. D-94804 AMPLIFIER (MODIFIED FOR USE IN 50-70 SYSTEM)

3.1 Use: In 50-70 System as a main amplifier and current supply set to two 49 type Amplifiers (principally B-49-C or D-49-C Amplifiers).

3.2 Description:

Required Power Supply . . . 105-125 volts, 50-624 cycles AC, 100 watts.
 Consists of 1 - D-94868 Apparatus Box, containing:
 1 - D-95036-C Amplifier
 1 - D-94852 Control Unit, modified (in the field) per Drawing ASO-5545 as shown in E.B. "Control Units, D-94852 Type", File 4.06.

4. INSTALLATION

4.1 Mount the apparatus box on the wall, and make the conduit connections per system drawings. The field supply lead supplied with the apparatus, over the input unit, make the wiring connections per system wiring diagram, and the cord connections per ASO-3689.

4.2 Adjust switch D-2 to position 1, 2, or 3, for line voltage of 105-110, 110-120, or 120-125, respectively.

Insert two 262-A, two 275-A (D-95036 Amplifier) or two 300-A (D-95036-G Amplifier) and one 274-A Vacuum Tubes, and one 2 amp. Magnet Fuse. Refer to E.B.'s on systems, for additional adjustment data.

5. MERCHANDISING

5.1 The three components of the D-94804 Amplifier are listed and shipped separately. Order as:
 "One D-95036 (or D-95036-G) Amplifier"
 "One D-94852 Control Unit"
 "One D-94868 Apparatus Box".



4.03

EQUIPMENT BULLETIN

AMPLIFIERS, D-94531 & D-95036 TYPES

Code	Spec.	Modification	Use
D-95036-D	TA-198	Noise level decreased; capacity increased to 5 watts (8 ohm load) 3 watts (16 ohm load); characteristic improved; 90-120V PEO Amplifier supply omitted.	Component of D-94804-B Amplifier; requires D-94852-B Control Unit and D-94864-B Apparatus Box.
D-95036-E	TA-208	Noise level decreased; gain increased 12 db; characteristic improved; capacity increased to 6 watts (8 ohm load); chassis length increased.	Home entertainment systems (Not a component of D-94804 Amplifier or D-94675 type Loudspeaking Telephone Outfit).
D-95036-F	TA-228	Noise level decreased; gain increased 2 db; capacity increased to 4.5 watts; characteristic improved; uses 300-A V.T.s in output stage.	For record only (non-standard) in conjunction with D-94852-D Control Unit.
D-95036-G	TA-234	Gain increased 3 db; capacity increased to 4.5 watts; Penning shield on input transformer; 300-A Vacuum Tubes used in output stage.	Component of TA-7306 Amplifier.

4. INSTALLATION

- 4.1 For information on cord connections and adjustments of D-94531 and D-95036 type Amplifiers, when used in D-94675 type Loudspeaking Telephone Outfits, refer to E.B. "Loudspeaking Telephone Outfits, D-94675 Type", File 4.22.
- 4.2 D-95036 type Amplifiers which are used in D-94804 type Amplifiers are to be installed and adjusted per E.B. "Amplifiers, D-94804 Type", File 4.07.
- 4.3 Install and adjust the D-95036-G Amplifier as directed in E.B. "Amplifier, TA-7306", File 4.03, using the cords and connecting facilities of the D-94852-D Control Unit.

5. MERCHANDISING

- 5.1 D-94531 Amplifiers are not stocked. For replacement, order as "One D-95036 Amplifier".
- 5.2 Modified D-94531 and D-95036 Amplifiers (with the exception of the D-95036-G Amplifier) are not stocked; they are obtainable only upon specific approval from Operating Headquarters and should be ordered by code number as listed in section 3.
- 5.2.1 The D-95036-G Amplifier is now available for use in the TA-7306 Amplifier. Order it as: - "One D-95036-G Amplifier".
- 5.3 Vacuum Tubes for these amplifiers should be ordered as follows: -

"Two 262-A Vacuum Tubes	} For all D-94531 or D-95036 type Amplifiers, except D-95036-F and D-95036-G
"Two 277-A Vacuum Tubes	
One 274-A Vacuum Tube	} D-95036-G
"Two 262-A Vacuum Tubes	
"Two 300-A Vacuum Tubes	
One 274-A Vacuum Tube	} For D-95036-F or D-95036-G Amplifiers.